



THIRD YEAR SURVIVAL AND HEIGHTS FOR 1984 PLANTATIONS

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INTRODUCTION

The Timber Management Branch of the New Brunswick Department of Natural Resources has been assessing survival and growth in plantations on Crown Land since 1977. This summary report presents information on heights and third year survival for 1984 plantations.

The information is presented in tables and graphs and interpretation of data is left to the reader. Description of the methods used can be found in "Third Year Survival and Heights of 1977 Plantations" - copies of which are available upon request from the Timber Management Branch.

Copies of "Third Year Survival and Heights for 1978, 1979, 1980, 1981, 1982, and 1983 Plantations" are also available upon request from the Timber Management Branch.

TABLE 1-84 NUMBER OF TREES PLANTED AND PERCENT OF PLANTATION AREA SAMPLED IN EACH LICENSE BY SPECIES, STOCK TYPE AND AREA FOR 1984 PLANTATIONS.

LICENSE	BLACK SPRUCE			WHITE SPRUCE			JACK PINE			RED PINE		EASTERN LARCH	
	BR ¹	PP ²	OWCA ³	SB ⁴	BR	BR	PP	OWCA	SB	PP	PP	PP	PP
1	Number ⁵	-	1 948 000	-	-	-	631 000	-	49 000	-	-	-	-
	Area ⁶	-	905	-	-	-	214	-	24	-	-	-	-
	% ⁷	-	30	-	-	-	27	-	0	-	-	-	-
2	Number	-	1 386 000	-	-	-	1 470 000	-	-	-	-	104 000	-
	Area	-	616	-	-	-	686	-	-	-	-	40	-
	%	-	27	-	-	-	11	-	-	-	-	100	-
3	Number	-	746 000	-	-	-	1 883 000	-	-	-	-	-	-
	Area	-	373	-	-	-	828	-	-	-	-	-	-
	%	-	49	-	-	-	45	-	-	-	-	-	-
4	Number	-	1 182 000	-	-	-	3 565 000	-	-	-	-	-	-
	Area	-	573	-	-	-	1 658	-	-	-	-	-	-
	%	-	0	-	-	-	29	-	-	-	-	-	-
5	Number	-	103 000	-	-	-	258 000	-	-	-	-	-	-
	Area	-	46	-	-	-	109	-	-	-	-	-	-
	%	-	35	-	-	-	50	-	-	-	-	-	-
6	Number	183 000	1 200 000	36 000	-	244 000	2 145 000	130 000	202 000	73 000	61 000	-	-
	Area	83	562	16	-	116	1 015	69	97	33	28	-	-
	%	100	28	38	-	67	22	17	42	15	0	-	-

TABLE 1-84 CONTINUED.

LICENSE	BLACK SPRUCE				WHITE SPRUCE			JACK PINE			RED PINE		EASTERN LARCH	
	BR ¹	PP ²	OWCA ³	SB ⁴	BR	BR	BR	PP	OWCA	SB	PP	PP	PP	PP
7	Number	141 000	773 000	-	-	-	-	1 325 000	-	199 000	-	-	170 000	
	Area	63	371	-	-	-	-	592	-	82	-	-	83	
	\$	100	22	-	-	-	-	21	-	93	-	-	100	
8	Number	50 000	840 000	311 000	-	49 000	-	270 000	-	-	-	-	-	
	Area	25	390	146	-	24	-	124	-	-	-	-	-	
	\$	100	0	100	-	100	-	0	-	-	-	-	-	
9	Number	-	1 003 000	-	-	-	-	201 000	-	-	-	-	-	
	Area	-	469	-	-	-	-	93	-	-	-	-	-	
	\$	-	63	-	-	-	-	34	-	-	-	-	-	
10	Number	279 000	2 144 000	403 000	385 000	-	-	-	-	-	-	-	-	
	Area	147	1 027	212	163	-	-	-	-	-	-	-	-	
	\$	82	64	32	100	-	-	-	-	-	-	-	-	

¹Bare Root Stock Type

²Paper Pot Stock Type

³Overwintered Can Am Stock Type

⁴Styroblock Stock Type

⁵Number of Trees Planted

⁶Area Planted in Hectares

⁷Percent of Areas Sampled

TABLE 2-84 MEAN SURVIVAL IN PERCENT ONE YEAR AND THREE YEARS AFTER PLANTING BY SPECIES AND STOCK TYPE FOR 1984 PLANTATIONS.

LICENSE	BLACK SPRUCE				WHITE SPRUCE		JACK PINE			RED PINE		EASTERN LARCH	
	BR ¹	PP ²	OWCA ³	SB ⁴	BR	BR	PP	OWCA	SB	PP	PP	PP	PP
1	1st Year ⁵	-	-	-	-	-	100	-	-	-	-	-	-
	3rd Year ⁶	-	-	-	-	-	100	-	-	-	-	-	-
2	1st Year	-	-	-	-	-	98	-	-	-	-	88	-
	3rd Year	-	-	-	-	-	98	-	-	-	-	75	-
3	1st Year	-	-	-	-	-	92	-	-	-	-	-	-
	3rd Year	-	-	-	-	-	89	-	-	-	-	-	-
4	1st Year	-	-	-	-	-	88	-	-	-	-	-	-
	3rd Year	-	-	-	-	-	84	-	-	-	-	-	-
5	1st Year	-	-	-	-	-	98	-	-	-	-	-	-
	3rd Year	-	-	-	-	-	97	-	-	-	-	-	-
6	1st Year	84	88	63	-	85	94	89	100	88	-	-	-
	3rd Year	82	83	58	-	84	93	89	100	88	-	-	-
7	1st Year	44	93	-	-	-	97	-	92	-	90	-	-
	3rd Year	56	93	-	-	-	97	-	91	-	78	-	-
8	1st Year	93	-	90	56	-	-	-	-	-	-	-	-
	3rd Year	88	-	84	53	-	-	-	-	-	-	-	-

Table 2-84 CONTINUED.

LICENSE	BLACK SPRUCE				WHITE SPRUCE		JACK PINE			RED PINE		EASTERN LARCH	
	BR ¹	PP ²	OWCA ³	SB ⁴	BR		BR	PP	OWCA	SB	PP	PP	PP
9	1st Year	-	82	-	-	-	-	96	-	-	-	-	-
	3rd Year	-	78	-	-	-	-	93	-	-	-	-	-
10	1st Year	79	91	90	-	-	-	-	-	-	-	-	-
	3rd Year	71	86	86	-	-	-	-	-	-	-	-	-
PROVINCIAL	83	90	89	90	56		85	94	89	93	88		89
AVERAGE	79	86	83	86	53		84	92	89	93	88		77

¹Bare Root Stock Type²Paper Pot Stock Type³Overwintered Can Am Stock Type⁴Styroblock Stock Type⁵Mean Survival in percent one year after planting⁶Mean Survival in percent three years after planting

TABLE 3-84 AVERAGE HEIGHT OF PLANTATION TREES - INITIAL, ONE YEAR AND THREE YEARS AFTER PLANTING BY SPECIES
AND STOCK TYPE FOR 1984 PLANTATIONS.

LICENSE	BLACK SPRUCE			WHITE SPRUCE			JACK PINE			RED PINE		EASTERN LARCH	
	BR ¹	PP ²	OWCA ³	SB ⁴	BR	BR	PP	OWCA	SB	PP	PP	PP	PP
1	Initial ⁵	-	11	-	-	-	-	-	-	-	-	-	-
	1st Year ⁶	-	21	-	-	-	20	-	-	-	-	-	-
	3rd Year ⁷	-	32	-	-	-	52	-	-	-	-	-	-
2	Initial	-	12	-	-	-	20	-	-	-	-	-	-
	1st Year	-	24	-	-	-	38	-	-	-	-	15	27
	3rd Year	-	51	-	-	-	79	-	-	-	-	57	57
3	Initial	-	12	-	-	-	11	-	-	-	-	-	-
	1st Year	-	18	-	-	-	19	-	-	-	-	-	-
	3rd Year	-	37	-	-	-	54	-	-	-	-	-	-
4	Initial	-	-	-	-	-	9	-	-	-	-	-	-
	1st Year	-	-	-	-	-	19	-	-	-	-	-	-
	3rd Year	-	-	-	-	-	65	-	-	-	-	-	-
5	Initial	-	10	-	-	-	19	-	-	-	-	-	-
	1st Year	-	20	-	-	-	35	-	-	-	-	-	-
	3rd Year	-	30	-	-	-	74	-	-	-	-	-	-
6	Initial	28	12	14	-	24	14	12	13	5	-	-	-
	1st Year	41	22	18	-	40	37	30	24	11	-	-	-
	3rd Year	59	39	36	-	112	87	117	53	40	-	-	-

TABLE 3-84 CONTINUED.

LICENSE	BLACK SPRUCE			WHITE SPRUCE			JACK PINE			RED PINE		EASTERN LARCH	
	BR ¹	PP ²	OMCA ³	SB ⁴	BR ⁵	BR ⁶	PP	OMCA	SB	PP	PP	PP	PP
7	Initial	22	-	-	-	-	19	-	16	-	-	24	
	1st Year	26	-	-	-	-	40	-	37	-	-	38	
	3rd Year	39	-	-	-	-	78	-	80	-	-	69	
8	Initial	25	-	14	-	16	-	-	-	-	-	-	
	1st Year	30	-	25	-	19	-	-	-	-	-	-	
	3rd Year	55	-	62	-	37	-	-	-	-	-	-	
9	Initial	-	15	-	-	-	7	-	-	-	-	-	
	1st Year	-	21	-	-	-	19	-	-	-	-	-	
	3rd Year	-	46	-	-	-	71	-	-	-	-	-	
10	Initial	19	15	20	19	-	-	-	-	-	-	-	
	1st Year	22	28	27	28	-	-	-	-	-	-	-	
	3rd Year	35	52	49	37	-	-	-	-	-	-	-	
Prov.	Initial	23	13	16	19	16	24	13	15	5	21		
	1st Year	30	23	25	28	19	40	28	34	11	35		
	3rd Year	50	43	54	37	37	112	70	74	40	66		

¹Bare Root Stock Type

²Paper Pot Stock Type

³Overwintered Can Am Stock Type

⁴Styroblock Stock Type

⁵Height in cm at time of planting

⁶Height in cm one year after planting

⁷Height in cm three years after planting

Table 4-84 Percent of Third Year Assessment Plots in Each Density
Class* by License for 1984 Plantations

LICENSE		0 - 1500		1501 - 3000			3000+		
1	0 ^a	100 ^b	100 ^c	90	0	0	10	0	0
2	0	100	100	100	0	0	0	0	0
3	0	73	64	83	27	27	17	0	9
4	0	100	50	88	0	0	12	0	50
5	0	100	67	82	0	33	18	0	0
6	0	75	63	84	25	25	16	0	12
7	0	75	75	83	25	25	17	0	0
8	0	100	100	77	0	0	23	0	0
9	0	100	83	95	0	0	5	0	17
10	0	100	75	95	0	10	5	0	15

* 5th year standards

a Planted trees only

b Includes natural softwood regeneration other than balsam fir

c Includes all natural softwood regeneration.

TABLE 5-84 DENSITY OF ALL NATURAL STEMS IN THIRD YEAR ASSESSMENT PLOTS
BY LICENSE FOR 1984 PLANTATIONS.

DENSITY - COMPETITION SPECIES (STEMS/HA)																
				NATURAL SOFTWOOD				NATURAL HARDWOOD				SHRUBS/OTHER				
LICENSE	PLANTATION	SILVICULTURE TREATMENT NUMBER	AREA (HA)	SPRUCE	PINE	FIR	OTHER SOFT.	MAPLE	YELLOW BIRCH	BEECH	WHITE BIRCH	ASPEN	OTHER HARD.	SHRUBS	OTHER	
UPSALQUITCH	JACQUET RI FIRE	101006284BP1	58	0	0	0	0	0	0	0	0	0	0	0	0	
	JACQUET RI FIRE	101006284BP2	53	0	0	0	0	0	0	0	0	350	0	1 719	0	
	BIG HOLE BROOK	101112084BP0	87	64	0	191	0	85	0	0	785	42	0	5 963	460 000	
	POPELOGAN RIVER	101112584BP0	130	0	0	191	0	0	0	0	32	0	0	2 547	245 000	
License Average																
NEPISIGUIT	ANACONDA MINES	102001484BP0	20	0	0	573	0	509	0	0	3 629	0	0	1 146	180 000	
	RIO ROAD	102023084BP0	66	42	0	212	0	0	0	0	127	0	0	594	313 333	
	RIO ROAD	102023184BP1	40	0	0	85	0	0	212	0	2 122	127	0	12 605	386 667	
	TETAGOUCHE RIVER	102025684BP0	101	0	0	0	0	0	0	0	25	0	0	1 502	380 000	
	RD TO RESOURCES	102026084BP0	55	0	0	382	0	191	0	0	477	0	0	223	0	
License Average																
LOWER MIRAM.	W BR SABBIES R	203001284BP0	108	2 207	42	85	0	64	0	0	1 528	64	21	7 746	153 333	
	ESKEDELLOC RIV	203030984BP0	85	0	382	0	0	64	0	0	64	0	0	1 337	110 000	
	ESKEDELLOC RIV	203031084BP0	33	0	0	0	0	0	0	0	64	0	0	764	90 000	
	ESKEDELLOC RIV	203031184BP0	43	0	127	0	0	0	0	0	255	0	0	700	140 000	
	ESKEDELLOC RIV	203031284BP0	18	0	127	0	0	0	0	0	127	0	0	1 273	60 000	
	SALMON BROOK	20303284BP0	23	191	0	0	0	64	0	0	0	0	0	64	0	
	SALMON BROOK	203032384BP0	57	509	0	0	0	0	0	0	0	0	0	212	0	
	SIX MILE BROOK	203032784BP1	14	64	64	3 438	0	318	0	0	127	0	0	828	510 000	
	SIX MILE BROOK	203032884BP0	76	1 178	955	95	0	477	0	0	4 074	0	32	2 515	500 000	
	TEN MILE BROOK	203037884BP1	36	255	0	42	0	0	0	0	340	1 231	0	7 003	0	
	TEN MILE BROOK	203037884BP2	29	127	0	1 273	0	0	0	0	255	8 403	0	8 149	0	
	TEN MILE BROOK	203037984BP0	30	1 401	127	446	0	764	0	0	3 820	1 337	955	6 557	130 000	
	WEST SABBIES	203037984BP0		789	187	335	0	157	0	0	1 184	505	72	3 603	164 667	
	License Average															

TABLE 5-84 CONTINUED.

DENSITY - COMPETITION SPECIES (STEMS/HA)															
NATURAL SOFTWOOD				NATURAL HARDWOOD								SHRUBS/OTHER			
LICENSE	PLANTATION	SILVICULTURE TREATMENT NUMBER	AREA (HA)	SPRUCE	PINE	FIR	OTHER SOFT.	MAPLE	YELLOW BIRCH	BEECH	WHITE BIRCH	ASPEN	OTHER HARD.	SHRUBS	OTHER
UPPER MIRAM.	LITTLE RIVER	204000684BP2	135	0	51	484	0	484	0	0	0	76	0	4 456	300 000
	BAYLES LAKE	204001784BP1	154	85	0	18 165	0	0	42	0	10 568	0	0	3 820	80 000
	BAYLES LAKE	204002284BP0	70	127	0	4 202	0	0	0	0	5 730	0	0	16 807	0
	JACK'S LAKE	204002984BP0	130	0	0	0	0	0	0	0	318	0	0	785	306 667
License Average															
KENT	LAKETON	205000184BP0	16	32	16	4 082	0	151	8	0	2 817	24	0	4 504	223 750
	LAKETON	205000184BP0	16	64	0	2 483	0	700	0	0	2 069	0	127	14 356	110 000
	LAKETON	205020084BP0	27	0	42	0	0	212	0	0	509	0	127	1 316	0
	ACADIEVILLE	205020184BP0	28	0	0	0	0	127	0	0	255	1 369	32	1 273	0
License Average															
QUEENS CHAR.	BURNTLAND LAKE	206997184BP0	50	2 515	95	605	0	191	0	0	32	318	0	1 464	555 000
	BURNTLAND BROOK	206998484BP0	108	891	85	488	64	1 273	0	0	2 398	276	0	9 231	836 667
	N. CAINS RIVER	206999984BP1	31	0	0	223	0	0	0	0	0	32	0	1 114	0
	N. CAINS RIVER	206999984BP2	12	0	64	955	0	0	0	0	0	0	0	0	0
	PLEASANT BROOK	306001484BP1	5	64	0	0	0	0	0	0	64	127	64	4 711	200 000
	PLEASANT BROOK	306001484BP2	6	2 037	382	0	127	0	0	0	0	0	0	891	160 000
	NEVERS BROOK	306004284BP1	47	0	0	0	0	318	0	0	0	0	0	1 082	0
	NEVERS BROOK	306004284BP2	59	42	42	0	0	637	0	0	467	212	0	42	0
	BRONSON	306017184BP0	41	127	255	127	0	127	0	0	0	255	0	255	0
	BRONSON	306017184BP2	44	976	127	212	0	42	0	0	127	0	0	0	0
	SUNDAY LAKE	406001284BP1	83	0	0	51	0	458	127	0	51	0	0	2 470	120 000
	SUNDAY LAKE	406001284BP2	22	0	0	0	0	0	0	0	0	0	0	0	0
	MCDUGALL INLET	406002784BP0	97	0	0	0	0	0	0	0	32	32	0	1 369	30 000
License Average															
				546	57	241	13	355	17	0	442	114	3	2 536	224 211

DENSITY - COMPETITION SPECIES (STEMS/HA)

DENSITY - COMPETITION SPECIES (STERS/HA)															
NATURAL SOFTWOOD				NATURAL HARDWOOD						SHRUBS/OTHER					
LICENSE	PLANTATION	SILVICULTURE TREATMENT NUMBER	AREA (HA)	SPRUCE	PINE	FIR	OTHER SOFT.	MAPLE	YELLOW BIRCH	BEECH	WHITE BIRCH	ASPEN	OTHER HARD.	SHRUBS	OTHER
FUNDY	RIDERS BROOK	307000484BP0	76	0	0	51	0	280	0	0	382	2 292	1 171	1 426	0
	FOUR MILE LAKE	307007784BP1	56	700	0	318	0	0	159	0	10 791	0	0	1 528	0
	FOUR MILE LAKE	307007784BP2	80	159	0	95	0	0	0	0	2 960	0	32	64	10 000
	BUCKLEY ROAD	307998584BP1	63	0	255	0	0	891	0	0	12 860	0	2 037	20 117	100 000
	BUCKLEY ROAD	307998584BP2	27	2 928	0	42	127	255	0	0	1 231	0	1 061	8 403	46 667
	YOUNGAMCKENZIE	407999984BP0	122	55	18	546	0	164	0	0	0	0	18	0	618
License Average				525	16	244	16	175	27	0	3 061	483	467	2 631	11 667
YORK	NAPADOGAN STR.	408000984BP0	146	0	0	127	0	0	0	0	0	76	0	1 222	100 000
	NAPADOGAN STR.	408100184BP0	49	0	0	207	0	255	0	0	0	0	0	1 273	0
License Average				0	0	176	0	157	0	0	0	29	0	1 254	38 462
CARLETON	MAVIS	409000384BP0	18	0	0	637	0	318	0	0	0	64	0	2 101	1 520 000
	MAVIS	409000984BP0	65	51	0	255	0	255	0	0	0	127	0	5 246	320 000
	4 MILE BROOK	409001084BP0	79	255	0	1 146	0	382	0	0	127	0	0	1 401	40 000
	MIRAMICHI LAKE	409001184BP0	50	32	0	318	0	127	0	0	32	95	0	509	275 000
	4 MILE BROOK	409001284BP0	85	0	0	573	0	0	0	0	414	64	0	286	0
	GORBY GULCH	409900284BP0	30	286	0	9 390	32	0	0	0	64	0	0	382	2 820 000
License Average				89	0	2 241	6	140	0	0	108	70	0	1 827	893 000
RESTIGOUICHE TOBIQUE	SEVEN MILE BK.	110013584BP0	53	0	0	297	0	0	0	0	0	0	0	127	353 333
	SEVEN MILE BK.	110013684BP0	39	0	0	255	0	382	0	0	0	0	0	127	180 000
	SEVEN MILE BK.	110013884BP0	23	0	0	127	0	0	0	0	0	0	0	0	100 000
	WILD GOOSE BK.	510008884BP0	64	0	0	3 183	0	0	0	0	0	0	0	6 748	120 000

TABLE 5-84 CONTINUED.

DENSITY - COMPETITION SPECIES (STEMS/HA)															
LICENSE	PLANTATION	SILVICULTURE TREATMENT NUMBER	AREA (HA)	NATURAL SOFTWOOD				NATURAL HARDWOOD				SHRUBS/OTHER			
				SPRUCE	PINE	FIR	OTHER SOFT.	MAPLE	YELLOW BIRCH	BEECH	WHITE BIRCH	ASPEN	OTHER HARD.	SHRUBS	OTHER
RESTIGOUCHE TOBIQUE	N BRANCH GOUNAM	510009084BP0	15	0	0	3 310	0	3 565	0	0	15 024	0	0	509	0
	MOOSE VALLEY	510009384BP0	27	191	0	3 756	0	0	64	0	1 210	0	0	127	20 000
	NINE MILE BROOK	510009484BP0	32	318	0	573	0	0	0	0	700	0	0	1 464	80 000
	NINE MILE BROOK	510009584BP0	38	85	0	806	0	1 188	0	0	255	127	0	3 990	126 667
	W BR UNION BROOK	510009684BP0	23	127	0	764	0	0	0	0	127	0	0	0	100 000
	MCDONALD BROOK	510009884BP0	39	0	0	637	0	1 401	0	0	4 456	255	0	1 974	300 000
	MCDONALD BROOK	510009984BP0	87	42	0	1 867	0	4 626	0	0	424	0	0	2 547	346 667
	W BR. UNION BR.	510010184BP0	42	424	0	2 504	0	212	42	0	722	0	0	2 292	60 000
	W BK. UNION BR.	510011184BP0	10	0	0	509	0	0	0	0	0	0	0	0	60 000
	MCDONALD BROOK	510011284BP0	11	0	0	127	0	1 655	0	0	382	0	0	1 273	520 000
	WILD GOOSE BROOK	510011484BP0	163	0	0	976	0	0	0	0	0	0	0	1 061	113 333
	PURVIS BROOK	510012484BP0	22	0	0	891	0	0	0	0	191	64	0	2 292	580 000
	PURVIS BROOK	510012784BP0	32	127	0	573	0	0	0	0	1 146	0	0	2 737	1 490 000
	PURVIS BROOK	510012884PD0	30	0	0	764	0	0	0	0	1 528	64	0	6 430	400 000
	SERPENTINE RIV.	510500484BP0	165	0	0	286	0	255	0	0	4 138	32	0	1 273	170 000
SERPENTINE RIV.	510500584BP0	90	0	0	1 210	0	0	0	0	446	0	0	1 019	250 000	
License Average				75	0	1 115	0	671	6	0	1 357	31	0	1 851	270 732
Provincial Average				279	38	879	5	281	10	0	1 152	186	64	2 823	241 239

TABLE 6-84 CONTINUED.

LICENSE	PLANTATION	SITE PREPARATION	AREA (HA)	SPECIES	STOCK TYPE	INITIAL YEAR		FIRST YEAR		THIRD YEAR	
						HEIGHT (CM)	SURVIVAL (\$)	HEIGHT (CM)	SURVIVAL (\$)	HEIGHT (CM)	SURVIVAL (\$)
QUEENS CHARLOTTE	206997184BP0	Crusher	50	bs	PP	13	90	19	82	34	
	206998484BP0	Marden Roller	108	bs	PP	10	87	25	83	43	
	206999984BP1	Herbicide & Crusher	31	JP	BR	25	89	43	87	134	
	206999984BP2	Herbicide & Crusher	12	JP	OWCA	12	89	30	89	117	
	306001484BP1	Marden Roller	5	rP	PP	5	88	11	88	40	
	306001484BP2	Marden Roller	6	bs	OWCA	14	63	18	58	36	
	306004284BP1	Bracke	47	JP	BR	21	78	35	78	66	
	306004284BP2	Bracke	59	JP	PP	17	91	36	89	69	
	306017184BP1	Marden Roller	41	JP	SB	13	100	24	100	53	
	306017184BP2	Marden Roller	44	JP	PP	10	100	31	100	71	
	406001284BP1	Anchor Chains	83	bs	BR	28	84	41	82	59	
	406001284BP2	Anchor Chains	22	JP	PP	21	94	53	94	111	
	406002784BP0	Anchor Chains	97	JP	PP	13	92	40	91	104	
			605								
FUNDY	307000484BP0	Anchor Chains	76	JP	SB	16	92	37	91	80	
	307007784BP1	Anchor Chains	56	TL	PP	23	90	39	69	91	
	307007784BP2	Anchor Chains	80	bs	PP	11	93	24	93	54	
	307998584BP1	Bracke	63	bs	BR	22	44	26	56	39	
	307998584BP2	Bracke	27	TL	PP	26	90	37	88	49	
	407999984BP0	Disc Trencher	122	JP	PP	19	97	40	97	78	
			424								
YORK	408000984BP0	Shark Fin Barrels	146	bs	OWCA	14	90	25	84	62	
	408100184BP0	Shark Fin Barrels	49	bs	BR	25	93	30	88	55	
			195	ws	BR	16	56	19	53	37	
CARLETON	409000884BP0	Shark Fin Barrels	18	bs	PP	17	88	20	80	50	
	409000984BP0	Shark Fin Barrels	65	bs	PP	11	78	19	78	53	
			83	JP	PP	7	96	19	93	71	
	409001084BP0	Shark Fin Barrels	79	bs	PP	15	95	22	90	49	
	409001184BP0	Shark Fin Barrels	50	bs	PP	18	78	27	78	55	
	409001284BP0	Shark Fin Barrels	85	bs	PP	13	83	19	81	41	
	40900284BP0	Shark Fin Barrels	30	bs	PP	12	78	19	71	36	
		244									

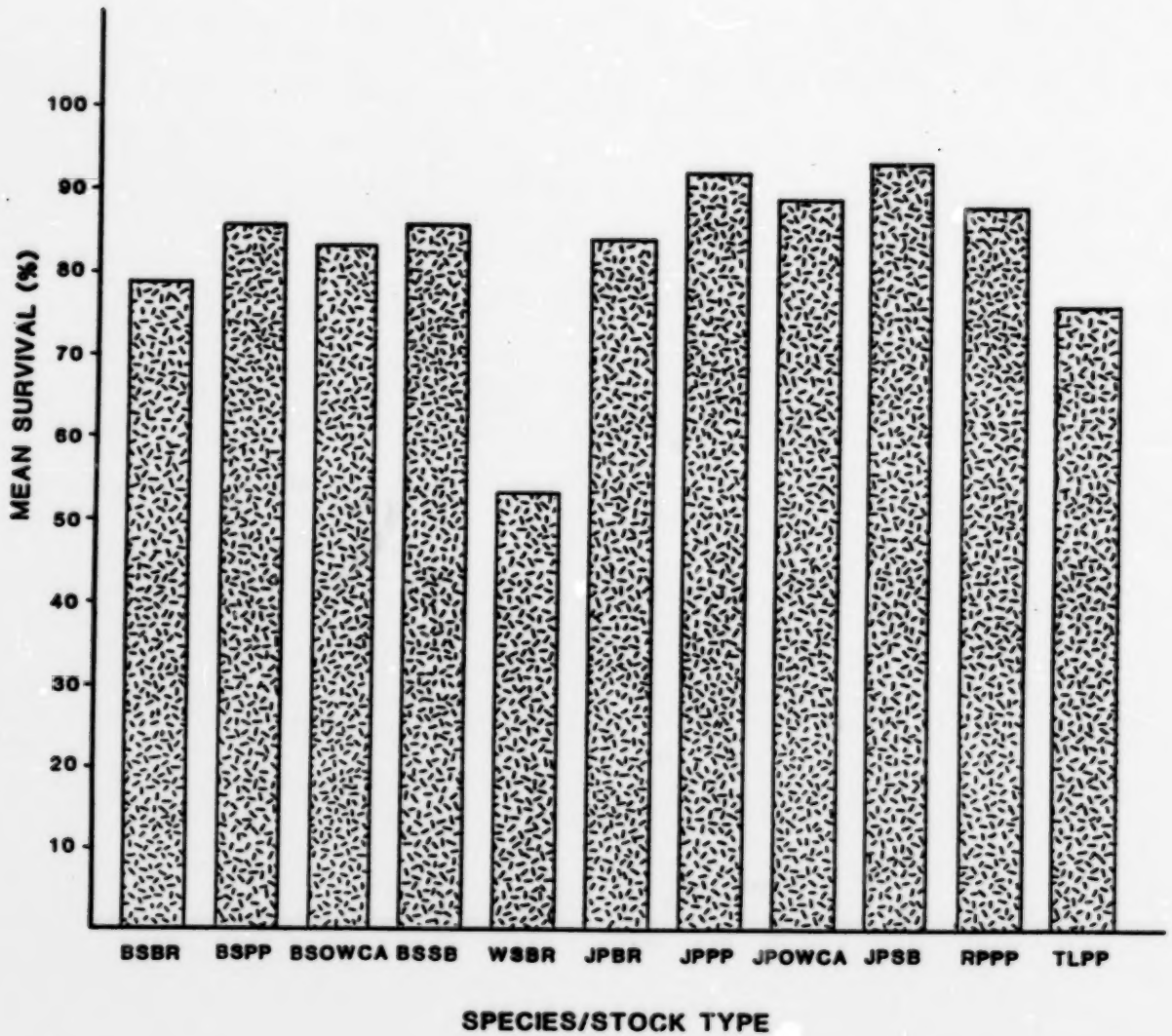


FIGURE 1-84. Third year mean survival percentages for planted trees grouped by species and stock type - 1984 Plantations.

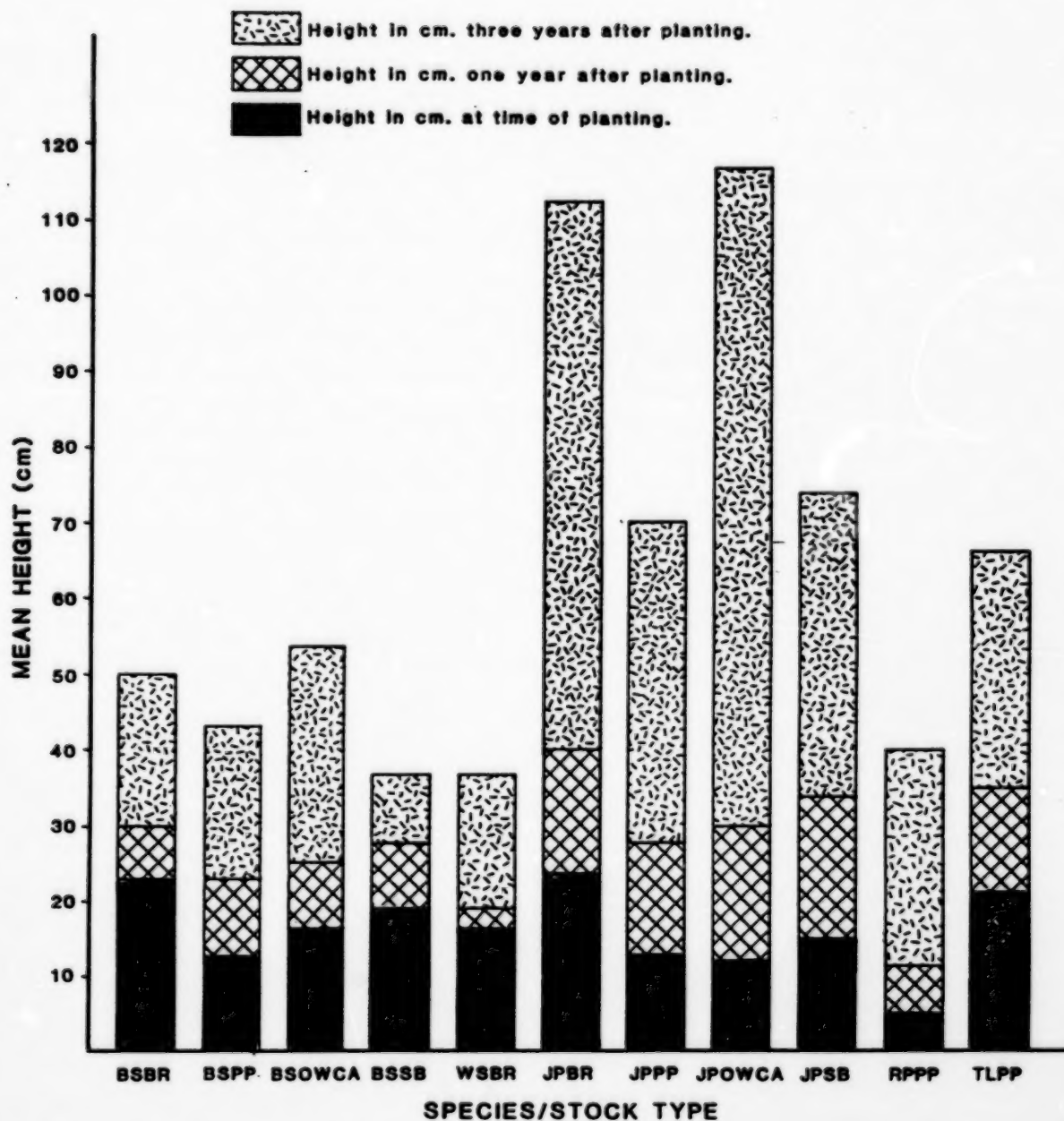


FIGURE 2-84. Mean heights for three year old planted trees grouped by species and stock type - 1984 Plantations

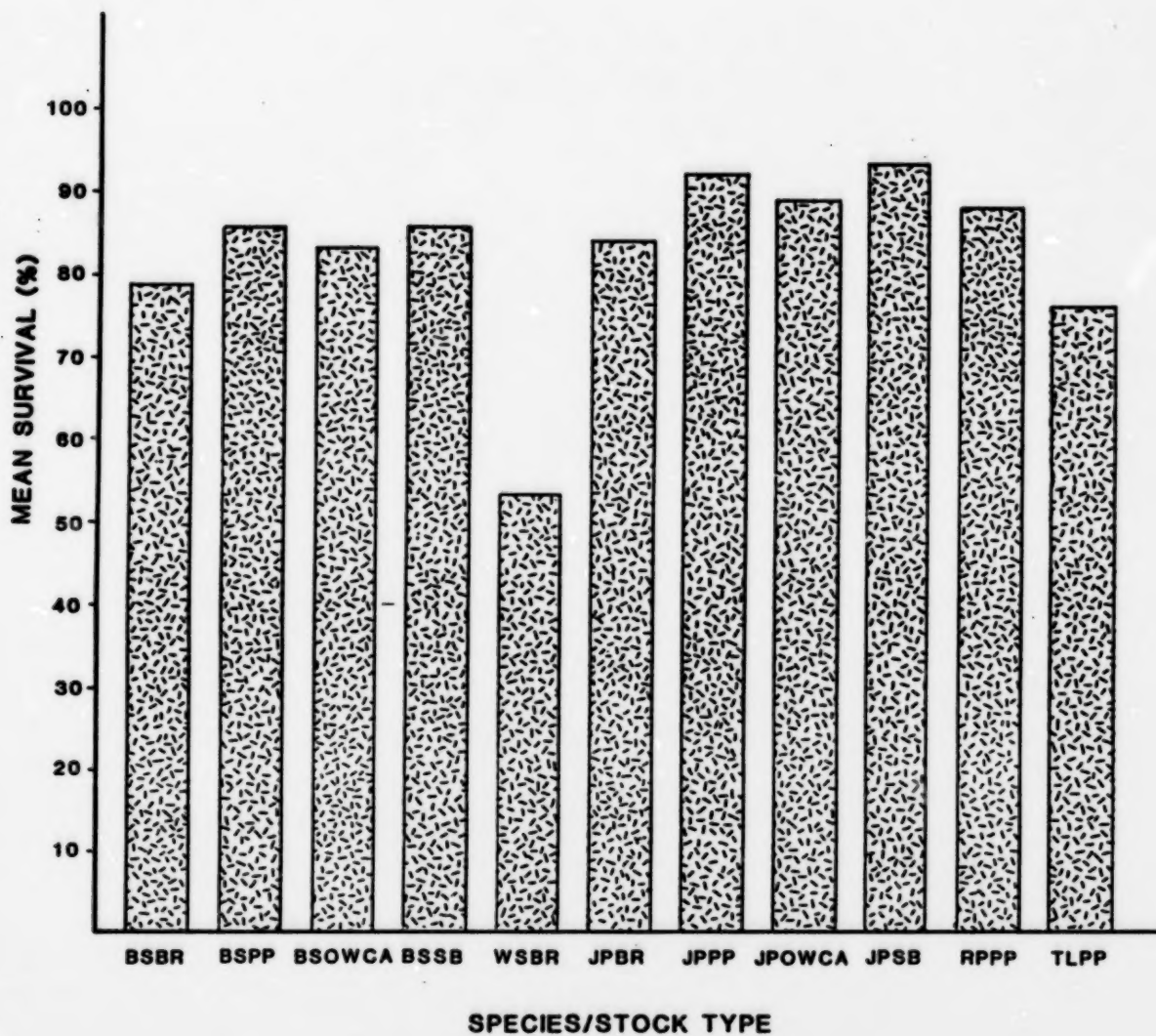


FIGURE 1-84. Third year mean survival percentages for planted trees grouped by species and stock type - 1984 Plantations.

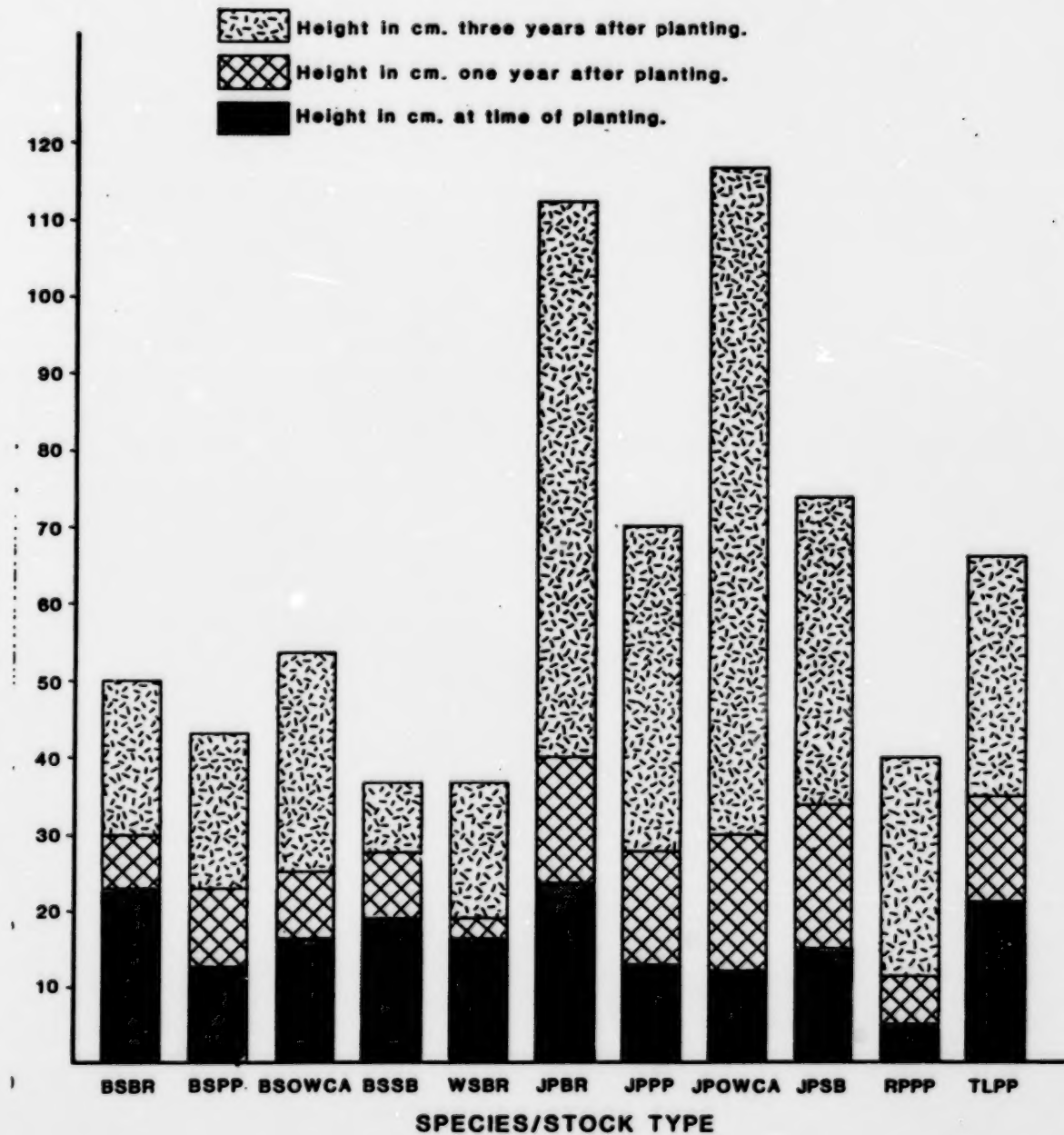


FIGURE 2-84. Mean heights for three year old planted trees grouped by species and stock type - 1984 Plantations